

**WHAT IS CLAIMED IS:**

1. A method of measuring an absorbed dose of ionizing radiation using a measuring device that bears an integral identification mark, comprising the steps of:

providing a support;

disposing on said support a first region capable of measuring an absorbed dose of ionizing radiation;

disposing on said support a second region that bears an integral identification mark;

exposing at least the first region to a dose of ionizing radiation; and

reading the signal from the first region.

2. The method of claim 1 further comprising a step of revealing the identification mark in the second region.

3. The method of claim 1 or 2 further comprising a step of deciphering the identification mark in the second region.

4. The method of claim 1 wherein the identification mark is a bar code, a series of alpha-numeric characters or a combination thereof.

5. The method of claim 1 wherein the identification mark is on a substrate.

6. The method of claim 5 wherein the substrate for the identification mark is a label.

7. The method of claim 5 wherein the substrate for the identification mark is an intermediate layer and a dark-colored layer coated directly onto the support.

8. The method of claim 1 wherein the substrate for the identification mark extends partially over the alanine-containing layer.

5           9. The method of claim 1 wherein the identification mark is uncovered/revealed through the use of a laser.

10           10. The method of claim 1 wherein the identification mark is printed onto a strip.

10           11. The method of claim 1 wherein the first region is coated on the support.

15           12. The method of claim 1 wherein the first region comprises a binder and alanine; wherein the alanine, upon exposure to ionizing radiation, produces radicals that remain stable for long periods of time.

13. The method of claim 1 wherein the support is flexible.

20           14. The method of claim 12 wherein the alanine is in crystalline form.

25           15. The method of claim 14 wherein the crystalline alanine comprises particles less than 100 microns in size.

16. The method of claim 11 wherein the coated first region is between 100 and 200 microns thick.